

13. A Study on Forecasting Future Skills Requirements

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In recent years, the Korean economy has experienced rapid transition into knowledge-based economy, more severe competition from open-door policy than before, and intense technological innovation. These changes are leading to changes in the socio-economic structure and, as a result, the uncertainty and instability surrounding the world of occupations are higher than ever before, especially in required skills from employers. For households, businesses, educational institutions, and government to respond actively and effectively against the rapidly changing skills requirements, it is important and urgent to forecast the trends of future skills requirement.

The main objective of this study is to develop a forecasting method for future skills requirement in both each occupation and economy as a whole. For this purpose, we have developed some experimental measurement method for skills imbalance which is decomposed into three different categories such as skills shortage, skills mismatch, and skills gap. Skills shortage captures quantitative mismatch, where labor demand for specific skills exceeds labor supply with those.

Skills mismatch is defined as coexistence of over-supply and over-demand for manpower with specific skills at the same time. Higher youth unemployment with labor shortage in the small & medium enterprise is the typical example of skills mismatch, where youth doesn't like to work under unfavorable working conditions. Skills gap exists when there are lots of job seekers with skills, but their acquired skills do not match with skills requirements from employers. Former two imbalances is mainly concerned with quantitative aspect of labor market imbalance, but the last one is distinguished as it is resulted from qualitative aspect.

Based on these conceptual frameworks, we have developed 'Employer Skills Survey' and conducted pilot survey for 163 companies with hiring experiences

for newly graduated from 4 year universities in 2007. According to the results, skills imbalance explains about 8.9% of total newly hired 4 year university graduates in 2007 and in case of professionals' occupation, and in particular, reached 19.5% of the same figures. This means that lots of job vacancies are resulted from insufficient skills formation from educational sectors and youth unemployment among 4 year university graduates is able to be significantly lowered with appropriate education in universities. To overcome mismatch in skills developed at educational institution with requirement from employer, identifying and forecasting actual & required skills for each job is most important. Based on this education-labor market linkage information, curricula and teaching methods in educational institutions should be aligned.